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COMMUNICATIONS.

Dental Tumors—their Pathology.

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Diseases of the Mouth—*Continued.*

Dental tumors differ from the osteoids in the one great and important feature of being non-malignant.

The various causes, primary to these lesions, were set forth fully in my paper on the "Surgical Relations of Anomalous Dentitions," and the proper prophylaxis may, I think, be justly deduced therefrom.

A common odontocele is the simplest form of dental tumor, and from this the lesion varies, obscuring itself until its histology is only demonstrable by the microscope.

Example.—Simple odontocele.—This morning, July 2, I saw a young Miss, aged, I suppose, about sixteen, having a tumor, intra-maxillary evidently, occupying the anterior left side of the hard palate.

This young lady, being the child of wealthy parents, has enjoyed the advantage of consultation on her case. Much difference of opinion was the only result of the meeting.

Now, her exact condition is as follows:—She has never had a single tooth of the permanent set extracted, and she lacks, to make up the complement common to her age, the cuspidate of the diseased side. Those who consulted on her case overlooked this striking deficiency, and hence their confusion. The tumor is, of course, dental, or, at least, so great is the probability of such being its character, considering the absence from the dental arch of the tooth, that any surgeon would feel justified, I think, in founding the character of a proposed operation on such data.

Dr. D. H. Agnew exhibited to me, a few days since, a couple of undeveloped, and evidently long dead, bicuspid teeth, which he had found in an anomalous tumor of the jaw. The growth was of cystic character, and these teeth lay free in the cavity. Its dental origin was sufficiently marked.

These teeth being found in the cyst, implies their absence from the arch. A diagnosis, by inference, was easy.

The other extreme of dental tumors is well illustrated by the case given from M. Forget's memoir of the Gaudalope banker's son. If the reader will take the trouble to refer back to the four drawings given with my paper on Odontocele, (Reporter, p. 110, 111, May 4,) he will be amply repaid for his pains by the complete understanding of the subject he will find himself able to get therefrom.

Fig. 1, represents the left half of the body of the inferior maxillary, hollowed into a large cavity, containing an ivory-like, bony tumor.

d. Side view of the alveolar edge.

a. Orifice of the dental canal upon the surface of the resection of the bone in the continuity of the ramus.

b. Plane of the cut in front, showing the second small molar which was found in it.

c. Crown of the first molar, in regular position.

Figs. 2 and 3. The two halves of the anatomic section, divided according to its axis, (osseous cyst, and included tumor.)

Fig. 2.—*c.* Crown of great molar, seen through a notch in the outer wall of the cyst.

d. Second small molar.

e. First small molar.

a and *b.* Points of the same wall, perforated by the prolongation of the tumor.

f. Summit of the most elevated of these.

Fig. 3.—*a.* Interior aspect of the tumor.

b. Great molar inverted.

c and *d.* Cellulo-fibrous membrane, interposed between the osseous cyst and tumor.

Fig. 4. Microscopical examination.

M. Forget, in presenting this case to the French Academy, remarked that it was a duality of anatomical and pathological lesion, so rare, that after the strictest research, he was led to believe it unexampled in the human species. Thus then, we have here, side by side, each extreme, and understanding each, there is not likely to come anything between that we may not be able readily to explain.

A dental germ assuming, or compelled to an abnormal position, may have various sequlæ. It may make a mal eruption; it may remain encysted; it may die after partial development, or it may heterogeneously develop.

The three first are fully studied in the paper on "anomalies." We have then but to consider heterogenous development, and we have mastered the pathology of the lesion, and all its various phases.

First, let us dissect a tooth—for the parts of a tooth are the parts of such tumors. A tooth is made up of enamel, dentine, cementum, pulp substance, and peridonteum.

Enamel of the Teeth.—Cortex strata, adamantina dentium; crusta dentium adamantina; substantia vitrea.

The enamel of a tooth is that portion which caps the crown. In structure, it is fibrous; its fibres radiating from the centre to the surface.

In microscopic structures, the enamel (Owens) consists of long and slender, solid, prismatic, for the most part hexagonal, fibres of phosphate carbonate, and fluate of lime; which are essentially the contents of extremely delicate membraneous tubes.

Dentine.—Os dentis, substantia ossea, ebur dentis. This is the portion of the tooth between the cementum and enamel and between the pulp and the enamel. It makes up the great body of the organ. Dentine is composed of numberless tubules, these being not larger than the one ten-thousandth of an inch in diameter; their course is waving, each tubule having several curves resembling, according to Retzius, the Greek letter ϛ. "Prof. Retzius confirms the observation of Müller, that the tubes contain an organic earthy matter in glandular masses, which disappears under the action of dilute muriatic acid. The cells, and the small tubes which radiate from them, also contain earthy matter, as in bone. They are naturally white and opaque; but, after maceration in dilute muriatic acid, become colorless and transparent."

Chemically, dentina differs from enamel principally in the absence of the fluate of lime.

Cementum—Crusta Petrosa.—The cementum of a tooth is that portion which invests the fangs. In character, it corresponds quite closely to the osseous structures. The microscope demonstrates clearly the existence of haversian canals, and the so-called corpuscle of Purkinge, or, as Robin prefers to term them, osteoplasts.

"In growing teeth, with fangs not fully formed, the cement is so thin that the Purkingian cells are not visible; it looks like a fine membrane, and has been described as the periosteum of the fangs, but it increases in thickness with the age of the tooth, and is the seat and origin of what are called exostoses of the fangs, which are wholly composed of it." "It is the presence of this osseous substance," says Professor Owen, "which renders possible many well-known experiments of which the human teeth have been the subject; such as their transplantation, and adhesion into the combs of cocks, and the establishment of a vascular connection between the tooth and the comb, etc. Under every modification, the cement is most highly organized, and most vascular of the dental tissues, and its chief use is to form the band of vital union between the denser constituents of the tooth, and the bone in which the tooth is implanted.

Dental Pulp.—The pulp is that vascular, reddish-gray, highly-sensitive substance, occupying the cavity of the tooth. It is made up of delicate connective tissue, in which ramify the dental nerve, artery, and vein.

"When," says Mr. Nasmyth, "the internal structures of a dental pulp is examined, the number of minute cells which present themselves in a vascular form is remarkable; they seem, indeed, to constitute the principle portion of its bulk. Mr. N. describes them as varying in size, from the smallest microscopic appearance to one-eighth of an inch in diameter; and as being disposed in different layers throughout the body of the pulp." This tissue is highly endowed, and, perhaps, more liable than any portion of the body to take on morbid action; fungoid degeneration is, perhaps, its second and most common disease.

Periodontal membrane.—This is the periosteum of the tooth. Anatomically and physiologically it differs little from this general class of membranes. Pathologically, I think it may be remarked as being more susceptible to disease, and more disposed to assume quickly the

acute conditions. For example, inflammation of the periodontal membrane is easily provoked, and, once inflamed, it is ever after surprisingly prone to re-assume morbid action. Again, we need only call to mind its epulic outgrowths; the frequency and varied character of these growths.

Familiar with tooth structure, turn to fig. 4, as referred to, and trace a perversion of development in all these structures; see them forming a tumor, strictly dental, yet, to the last degree, anomalous and abnormal.

Microscopic Examination of Dental Tumor, described in the "REPORTER," *pp.* 109, 110, 111, *made by Prof. Ch. Robin.*—Plate 1, fig. 4, (400 diameters.) —This figure represents a portion of a slight cut made into the tumor represented, (fig. 3, *a*.)

The preparation is taken from near the free edge, or the irregularly mammillated surface of the tumor. The latter is formed principally of the ivory or dentine, easily recognized upon the thin section by its very fine tubes, disposed in parallels, or nearly so, through part of their extent, (fig. 4, *e*.)

These tubes, radiating more or less regularly from the little depressions or cavities observable in the mass of the tumor, (fig. 3, *a*,) very near to each other through part of their extent, these tubes of ivory become more rare, fine, and ramified as they approach the surfaces of the dental tumor, (fig. 4, *d*, *f*,) and end in a very sharp point toward the lines of junction between the ivory and the enamel (*a*, *b*, *c*) and the cement, (*f*, *g*, *h*.) The presence of the ivory, which forms the greater part of the tumor, demonstrates its dental nature very clearly.

Enamel.—Another important particular is the presence of the enamel on the surface of the tumor, where it, in some measure, covers the irregularities with a varnish which molds itself upon them in order to penetrate more or less deeply into the fissures or depressions that divide the tumor superficially into lobes.

This bed of enamel varies in thickness from microscopic dimensions to a millimeter, (0,039,37 inch,) or near it, and is as irregular in places on the lower or adhering face as it is on the free surface, which the microscope alone allows to be seen. The portion of the section of the tumor that is here delineated (fig. 4) is taken at the level of one of the points where the enamel (*a*, *b*) in a manner penetrates (*c*) into the body of the ivory mass of which the tumor is principally formed.

The enamel is easily recognised by its narrow prisms, from six to eight thousandth of a millimeter in width, which are in immediate juxtaposition, (fig. 4, *a*, *b*.) The figure shows them inclined, as by the accidents of the cuts in making the section. When the cut is perpendicular, or nearly so, to their greatest axis, their prismatic form, with five or six faces, is easily seen; this is shown in the neighborhood of *b*, fig. 4.

Cement.—In the depth of the fissures, and here and there in the mass of the tumor, near its surface, and especially that part of the surface hidden in the adventitious cavity of the maxillary bone, the microscope discovers some trails or beds of variable thinness, formed entirely of the substance of the cement, (fig. 4, *g*.)

The cement is inclosed between masses of ivory, and is consolidated by the immediate contact (fig. 4) with the masses between which it lies. It extends itself in places with the surface of the tumor to the neighborhood, and even to contact with the enamel. The section represented in the plate is taken at a point that shows this arrangement, (fig. 4, *f*, *g*, *h*.) There are, besides, thin pieces of cement extending far forward into the body of the tumor.

The cement is known to be no other than the osseous substance. The figure before us exhibits the characteristic elements belonging to it. These are the microscopic cavities, called osteoplasts, or, incorrectly, osseous corpuscles, for they are excavations. The air that fills the dry bone makes these cavities appear black under the microscope, (fig. 4, *g*;) but, in the fresh state, they are full of liquid, and are pale and more difficult to observe than in the dry pieces.

These cavities, which are, in breadth and length, from one to three hundredths of a millimeter, are always of very irregular shape, on account of the presence of the fine tubes that start from all their peripheries, and traverse even the substance interposed between the osteoplasts.

The best joined pieces show that these little canals are subdivided two or three times, and are then inosculated with those of neighboring osteoplasts. The portion of cement, shown in the plate, does not exhibit this arrangement, which was visible, nevertheless, in the parts close to it.

The cuts in the tumor exhibit, moreover, little openings that are either full or empty, of a grayish or brown pus. These small orifices are from two to six-tenths millimeter and upward

in width, and from about one to two millimeters apart. The microscope shows that these orifices accompany the narrow, irregular cavities, sometimes in the form of elongated conduits hollowed out of the ivory which they pass through. The instrument also shows that the tubes of the latter start from these cavities to radiate toward the surface of the tumor, in the same manner as the tubes of the ivory in the normal tooth start from the natural cavity of the dental pulp. These narrow, irregular cavities, more or less elongated, traverse the mass of the tumor, and some of them even reach within a few millimeters of the surface.

These cavities are, in reality, nothing more than the pulp cavities of this morbid product, either rugous from desiccation or still containing some remnant of the dried pulp in the form of a brownish or grayish powder.

Thus we have the extremes: a simple cyst, with a tooth in it, and a tumor so complex in character and structure that no one but the microscopist might hope to be able to recognise it. Yet these tumors, differing so widely in their features are alike in the most important one of being benign. Their prophylaxis is the same, and for a good distance their surgery runs side by side.

Dental tumors, intermediate to these two classes, are of various features, as illustrated by the examples of epulo-dental disease in the paper of last week. But, with an ability to recognise the dental elements—with an understanding of the minute histology of enamel, dentine, cementum, and pulp substance—what difference can it make, having eyes and microscope, how these elements aggregate.

I once saw a tumor taken from the maxilla, which looked like a mass of ivory; it was quite as large as two of the molar teeth put together. I need scarcely say that it was two of the molars; their germ had in some way affiliated, and, remaining encysted, had produced this abortion. The microscope revealed very distinctly the tubulated character of the mass; this pronounced it dental quite as satisfactorily as though the shapeless lump had been molded to the tooth-form.

I have had shown me, as great curiosities, teeth with ivory masses projecting at right angles from their crowns. But I never have seen this anomaly where it was not plainly evident that the projection was a twin tooth—the result of germ-union;—there would be a tooth missing in the arch.

Many curious illustrative instances could be mentioned of anomalous incongruities in dental evolution; but, as we are prepared to understand, we would find them in character the same—enamel, dentine, cementum, and pulp structure. The arrangement only would be found to differ; with our eyes, or assisted by the microscope, we could or should be able to say of any of them, this, and this, and this is dental.

The ability, then, to distinguish a dental from a malignant osteoid tumor must certainly prove a source of much satisfaction; for, as M. Forget curtly remarks, "If intervention cannot be too radical in an instance of cancer, it is certain, on the contrary, that more caution and moderation are necessary when it is a question of a lesion, which is essentially local and of a benignant nature, and allows the surgical operation to be restricted to the precise limits of the lesion, without its being necessary to provide against an improbable repetition by encroaching upon the osseous tissues that border on it, and thus subjecting the patient to a mutilation, which could not be justified.

Recapitulatory.—There are twenty teeth in the deciduous denture, which twenty are to be replaced by thirty-two, each of which is to be quite twice the size of its predecessor.

2. Premature extraction of the first teeth interferes with the process of maxillary elongation. (See Reporter, May 11th, page 128.) This is the process by which nature attempts provision for the second set.

3. A contracted maxilla, having no accommodation for certain teeth, the germs of which are in the jaw, gives us, among other lesions, irregularity in dental evolution.

4. Irregularity in evolution yields morbid conditions, as described, and which conditions are influenced, not unlikely, by peculiarities of the general organization and manner of interference with development.

5. An overcrowded arch will surely yield periodontal and other minor troubles, and may produce lesions of grave character. The extraction of certain of the bicuspidate teeth of the permanent set should, therefore be practiced, whenever time shall make evident the existence of contractions on the part of the arch.

6. Dental tumors vary from simple cystic growth to such perverse and anomalous evolutions, that the microscope only is capable of explaining them.

7. A dental tumor is any abnormal growth of

the mouth, having its point of departure and development in irregularity of dental evolution.

8. Dental tumors are benign; operations for their cure promise all success, and may be practiced in exclusive consideration of the disease as it locally exists.

9. The existence of a dental tumor is to be inferred, "Ceteris paribus," when there is deficiency and derangement in the dental arch.

(*To be continued.*)

Hints and Observations on Military Hygiene, relating to Diet, Dress, Exercise, Exposure, and the Best Means of Preventing and Curing Medical and Surgical Diseases in the Army.

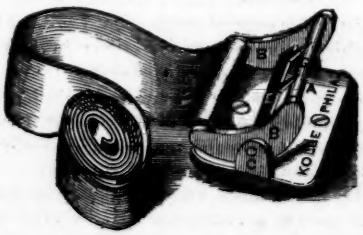
BY A HOSPITAL SURGEON OF PHILADELPHIA.

(*Continued from page* 268.)

SECTION IV.

Surgical Diseases and Accidents—Brief Hints previous to a Battle and in an Engagement.—The great value of an able and accomplished sur-surgeon, with the requisite presence of mind, willing and ready for any emergency, is never better seen than in the treatment of dangerous wounds received in battle. Many brave men must unavoidably perish from loss of blood and other causes, unless restored, and snatched, as it were, from the very jaws of death. There is no doubt, that the higher the surgeon stands in the opinion of the officers and men, the more willing will they be to risk their lives in action, being confident that every wound or injury they may chance to receive will be properly treated, and their lives, if possible, preserved.

Therefore the surgeon of a regiment should have everything necessary placed in a box or case. The capital instruments should be clean, bright, and in good order, with several tourniquets ready at hand. The following is a most admirable form for field purposes, having been modified by Kolbe, of this city.



The improvement in this field tourniquet, consists in gaining a more direct pressure than in the old form. Letter B, represents a half-circle buckle, and acts as a lever which is attached to a brass plate A, by two upright pieces, C; D, is a well-shaped wooden pad, covered with leather; F, is a strong webbing strap attached to B; G, is a roller which facilithe application strap.

He should have a number of needles, of all sizes threaded, a roll of patent lint, adhesive strips already cut, double and single headed rollers, and several handkerchiefs, which are most useful in bandaging the head, knee, etc. Each roll of muslin or bandage should have pins in it, so as to be convenient, besides a pin cushion, filled with brass, silver and steel pins; a bottle of good sweet oil. The ether and chloroform should be in bottles, covered with two cases, with several pieces of fine sponge, oil silk, etc. Also, towels, with cushions of bran, or straw, for dressing fractures. Splints of all sizes, also pieces of tape to secure the splints.

When your enemy is near, you should select a good location, shady, if possible, out of the range of the enemy's guns, and arrange a platform, to operate on, of wood. Cover the ground near it with straw, to lay your wounded men on, and, if possible, cover it with blankets, (never lay them on the cold ground,) so that they need not be disturbed after they are once dressed. Always make your arrangements to have two or three intelligent assistants; also, from six to twelve men to carry any of the men wounded, on litters; and always in removal to a great distance, obtain an ambulance, or a carriage on springs. Never neglect to have an abundance of water near at hand for the wounded men, with brandy, wine, and aromatic spirits of ammonia, and some vinegar, with laudanum, simple cerate; also, tannin, with a solution of the per sulphate of iron, as styptics. See that your assistants are properly instructed in the part they have to act. If a house, barn, or church can be procured, so much the better, but above all have your senses about you, and prevent confusion.

When the battle is once begun, and several wounded are brought to you at a time, always first take care of him who is in the most immediate danger; but, otherwise, dress them as they come, without distinction of rank. If, however, any is brought to you with a limb off, or a violent hæmorrhage, and you happen to be in the midst of an amputation or resection, or other capital operation, order your mate or assistant (for the present) to fix a tourniquet on e main artery supplying the part, and admin-

ister stimulants so that the flow of blood may not prove fatal.

Never encourage men to stay near you after their slight wounds are dressed, as there are cowards who with violent groans and complaints would make you believe they are much injured, who will stay about the surgeons' quarters, afraid of making a severe trial of their courage. Such fellows will, sometimes, try and get some trifling injury so that they may have a plausible excuse for going to the doctor.

When you are about entering on any capital operation, you should use your utmost endeavors to encourage the patient (if he is sensible) by promising him to treat him tenderly, and to operate with the utmost expedition, and promising the best results after it is over; never proceed rashly, or cruelly, and never give unnecessary pain, (using anæsthetics whenever you consider your patient cannot bear pain,) or his system is in a proper condition for them. Dress wounds as lightly as possible, with scraped or patent lint, anointed with oil or simple cerate: do not cover them with large bundles of lint, cotton, or sharpee, so as to produce heat in the part.

When the action is over, you should go round among your patients and examine if the wounds have bled much. If the hemorrhage still continues, remove the dressings, and ligate any small artery, which sometimes shows itself. After full reaction has taken place, also apply clean dressings. The tourniquets should still remain on those patients who have had their limbs amputated or shot off; in case you are deficient in the number of those useful articles, have assistants to watch them, or tie the two ends of a handkerchief together, and place a piece of wood in it, and have it ready to twist, placing a small pad over the main artery; or even let your patient be instructed how to tighten it, if he feels the wound to bleed. By neglecting this caution many valuable lives have been lost on the field of battle, and after important operations.

You must likewise see that those having wounded or fractured limbs, etc., lie easy, and that they are supported with proper diet, drinks, and medicine for symptomatic fever, pain, etc. As soon as possible, after the battle is over, see that your wounded have proper means of transportation to the nearest army hospital, acquainting the officer in command how many there are wounded, and the nature of their wounds, and how many are likely to prove mortal, etc.

We shall now pass to the consideration of surgical diseases and accidents, and first as to the use of agents to relieve pain during operations, called anæsthetics.

Although opposed to the indiscriminate use of anæsthetic medicines, yet when they are employed with proper caution, they are and have been found in military surgery a great blessing. As it relates to chloroform, there can be no doubt that many deaths have occurred from its use alone, where all needful caution have been observed in its administration. Chloroform is a most powerful sedative, and a valuable agent in local application, or in a mixture with sulphuric ether, one part, to two, three, or four parts of pure sulphuric ether, but should not be employed alone. Sulphuric ether is one of the safest and most reliable of this class of agents, and although one or two instances of death are stated to have followed its administration, this is but a very small number considering the vast number of cases in which it has been employed with success since the autumn of 1846, from the simple operation of extracting a tooth to the most extensive and dangerous operation in surgery.

The mischief, in most of the fatal cases from chloroform recorded, we are firmly convinced, results from the density of its vapor producing asphyxia, also its direct and immediate sedative action upon the heart. In administering ether, or chloroform, we should endeavor to have the patient's stomach empty, chest free from any constriction, an abundance of pure air. The system is then brought rapidly under its influence, by applying to the mouth of the patient a large loose sponge well charged with the anæsthetic. If the patient is weak, or feeble, or prostrate from shock, employ heat, brandy, ammonia and wine, to restore the circulation and heart's action, before commencing the inhalation.

Dr. Pitcher, late Surgeon United States Army, writing of his experience in regard to the use of anæsthetics in severe operations in surgery, more especially (chloroform) says: "whenever there is sufficient force in the circulation, and nervous activity to sustain the patient, I would give my voice with the general judgment of the medical profession, by which the use of anæsthetics in the severer operations of surgery is sustained. But regarding them (chloroform) as poisons of a sedative class, which, when introduced into the blood, produce cerebral exhaustion and cardiac syncope, if they do not

change the physical and vital properties of the blood itself, I feel obliged to remonstrate against their use in cases of syncope or nervous exhaustion."

Inflammation of the Eyes.—Soldiers are subject to an ophthalmia or inflammation of the eyes, not only from cold, but from frequent exposure to the night air, sun, and dust.

That resulting from cold is best and most speedily cured by mild aperients, the application of a solution of the nitrate of silver, two to four grains to the ounce of water. If there is much congestion, with headache, leeches or cups are to be applied, with small doses of opium and calomel; if the iris becomes affected, then the soft extract of belladonna must be applied around the brow. In all cases, we should examine carefully by reversing the lids, or with a probe or director, as the inflammation may be either occasioned or kept up by foreign bodies under the lids, or by cilia falling in or growiug inwards, which must be removed by a pair of broad toothed forceps.

In the condition called "granular lids," the lid must be inverted and touched alternately with a crystal of sulphate of copper, or 10 to 30 grains of nitrate of silver in solution, at times taking a broad lancet and scarifying the free hypertrophied papillae of the lids, and at night anointing them with the ung. hyd. precip. rub, U. S. P. frequently fomenting the eyes with decoction of poppy heads or chamomile flowers. In the Sanitary Report of the Army from Fort McRae, Florida, Dr. William H. Babcock reports, under the name of "hemeralopia," five cases of what seemed to have exhaustion or debility of the retina from excessive stimulation. The cause of this was undoubtedly the glaring reflection of the sun from the lake and white sand. It was characterized by dimness of vision during the day, accompanied sometimes by spectral figures, and by partial or total blindness after and just before sunset.

All these effectually recovered by simply wearing a green shade before the eyes, and avoiding to use them. In two of the cases, small blisters were applied to the temples with apparent benefit.

Gonorrhœa and Syphilis.—These two diseases are apt to follow the camp and the soldier. He has been the means of their propagation from the earliest times, and is seldom entirely free from them.

Gonorrhœa.—In men it has been divided into four different species, according to the supposed seat of the disorder, or the place of the urethra from whence the discharge comes:—1. From near the point of the urethra. 2. From about an inch above it. 3. From the whole tract of the urethra up to Cowper's glands. 4. From the prostate glands, and neck of the bladder.

Symptoms.—First an itching at the end of the penis, and a discharge of clear watery liquid, or of a yellowish green colored lymph, soon followed by badly concocted pus, attended with heat and pain in passing water. This is followed at night by a cordée or painful involuntary erection of the penis. If the gonorrhœa is violent, it is attended with swelling all along the perineum, or a swelling of the testicle, and at other times with a phymosis or swelling of the prepuce or paraphymosis.

Treatment.—Maintain an open discharge from the bowels. Fomentations of hot water applied every fifteen or twenty minutes, many times in the 24 hours, on removal, the parts should be covered with a single thickness of soft linen. The patient restricted to a low diet, with entire bodily repose.

Injections of nitrate of silver, 10 grains to the ounce of rose water. The bladder should be emptied immediately before the solution is employed, so that the urethra may have a chance to rest for several hours afterwards; a glass syringe should be used, ʒj. of solution, will be enough. As soon as the operation is completed, let the patient recline on a bed or sofa, and have warm fomentations applied to the parts for two or three hours. If the secretion still continue, and exhibit a puriform character, the injection is to be repeated in twenty-four hours, as on the preceding day. If two injections fail, resort to 3 or 4 gr. solution repeated 3 or 4 times in 24 hours, and be retained 3 or 4 minutes by pressing upon the orifice of the urethra. The point of the syringe should be inserted to the distance of an inch. At the moment the instrument is introduced, the penis should be turned upwards in nearly a perpendicular position between the thumb and finger. If the discharge has existed more than a day and a night before the patient applies for relief, it will be too late to make trial of the revulsive method.

℞ Copaibæ, - - - fʒiij.
Spts. æth. nit., - - fʒss.
Tinct. kino, - - - fʒss.
Mist. camphoræ, - - fʒij.
Morphiæ sulphatis, - gr. v. M.
S. A teaspoonful 3 times a day.

Those who cannot use the liquid balsam, can use the capsules of copaiba and extr. or oil of cubebs, which are more efficient than those of copaiba alone.

W. Acton's favorite prescription—

℞ Copaibæ, - - - ℥vj.
Magnes. calc., - - ℥iss.
Ext. hyoscyami, - - ℥ss.
Pulv. camphoræ, - - ℥j.
Theriacæ, - - - ℥iij.
Micæ panis, - - - ℥iss. M.

Ft. electuarium. Dose, one drachm 3 times a day.

It must be continued 10 or 12 days after the blennorhagia has entirely ceased, injections being used as adjuncts.

℞ Pulveris cubebæ, - ℥viij.
" cinnamomi, - ℥j.
" aluminis, - ℥j. M.

Div. in chart, No. xxxij. S. One powder 3 times a day.

℞ Plumbi acetatis
Zinci sulphatis, āā - gr. iij.
Aquæ rosar., - f℥vj.

Use 3 times a day.

In gleet, blister by cantharidal collodeon applied by means of a camel's hair pencil along the whole length of the canal, except two or three lines at the orifice, weak injection, as

℞ Aquæ. - - f℥viij.
Acid. nit. - gtt. xx. M.

Anatomy in its Relations to Medicine and Surgery.

By D. Hayes Agnew, M.D.,
Lecturer on Anatomy, Surgeon to Philadelphia Hospital, etc.

No. 46.

Median Sub-Hyoid Region — (*Continued.*)—To sum up, in a few sentences, the most important facts involved in tracheotomy, it may be remarked that the incision should be commenced over the cricoid cartilage, and carried to within half an inch of the top of the sternum, observing to follow accurately the median line, for which end the extended chin should range directly opposite to the middle of the sternum. After the division of the skin and superficial fascia, the white median line, which unites the sterno-hyoid and thyroid muscles, should be sought for; this divided, the loose trachial fascia, including the inferior thyroid veins, will next appear, and, perhaps, the middle thyroid artery. The isthmus of the thyroid body will be at the upper part of the wound, across the trachea, admitting, generally, of being pushed upward and held out of the way. All bleeding to be controlled before puncturing the trachea; the opening to be made a few rings below the cricoid, directly in the middle, and incised from below upward; the thyroid isthmus, when too large to be pushed aside, included in two ligatures, and divided between the great vessels at the root of the neck, always to be remembered, and last, the patient to be turned on the breast, with the head dependant, should any fluids find their way into the trachea. The risks consequent to the operation are by no means great, and it is to be regretted that an earlier resort is not had to it in threatening cases of croup. At the period in which it is generally done, little benefit is to be expected, as membranous exudations block up the smaller divisions of the bronchial passages.

Laryngo-Tracheotomy.—Another operation consists in opening the crico-thyroid membrane as in laryngotomy, and afterward dividing the cricoid cartilage. This constitutes *laryngo-tracheotomy.* In this operation a branch of the superior thyroid artery will probably require to be secured, as it passes along the lower border of the cricoid cartilages, (see fig. 41).

Thyroid Body.—This organ is classed among the glands which are destitute of ducts ("*ductless glands.*) Its size is exceedingly variable, though one ounce and a half may be regarded as the average weight of the body in the male subject. In the female its size is something greater. It consists of two lateral masses, each about 1¼ inch in length, and placed one on each side of the trachea and larynx; and a middle strip, the "*isthmus,*" stretching across the trachea immediately below the cricoid cartilage, and connecting the lateral masses together. The lateral lobes extend generally from opposite the fifth or sixth ring of the trachea to the middle of the sides of the thyroid cartilage; their upper extremities being wider apart than the lower, and having a rounded, somewhat prominent termination, have been called their cornua. Posteriorly they rest against the front of the vertebral column, extending frequently over the sheath of the carotid vessels, and being moulded, as it were, to the form of trachea and larynx, are in contact with both the œsophagus and pharynx. From the superior margin of the isthmus, or it may be from one of the lateral lobes, (generally the left,) rises a pyri-

midal process, the "*middle lobe*," which may reach, and be connected to the body of the hyoid bone. The so-called elevator muscle of the thyroid gland, described by Soemmering and other later anatomists, is not, in my estimation, a special muscle. That muscular fibres are found here, and that not unfrequent, cannot be doubted; but they are only detached fibres of either the sterno-hyoid or thyro-hyoid muscles, which a careful examination will confirm. The thyroid body is attached to the trachea and sides of the larynx by the tracheal fascia, and in front of the lateral lobes are the sterno-hyoid, homo-hyoid, and sterno-thyroid muscles.

Practical Observations.—The position of the thyroid gland explains the difficulty sometimes experienced in deglutition and respiration when it is much enlarged, pressure being made against the pharynx, œsophagus, or trachea. Cases are occasionally met with, one of which is very fresh in my mind, of paroxysmal attacks of suffocation, attending a hypertrophy of this body. The bulk was not sufficient to explain this phenomenon on the supposition of pressure against the trachea; but the situation of the recurrent laryngeal alongside that tube, a nerve endowing the muscles of the glottis with movement, (see fig. 43,) supplied a solution of the difficulty.

The enlargements of the thyroid may include the whole gland or either of the three lobes separately. Projecting, as the lateral portions may, over the sheath of the carotid vessels, such an enlargement might be confounded with an aneurism, the pulsation of the artery being communicated to the mass. As tumors, other than such as belong to the thyroid gland, appear in this region of the neck, tumors which may be safely removed, it becomes important to be able to establish a distinction. This may be determined by remembering the thyroid body is attached to the trachea by the tracheal fascia, and it must therefore move as the trachea moves. If the patient, laboring under a growth in this situation, be requested to swallow, it will, if belonging to the thyroid, rise and fall in the act; but if disconnected with it, no such movement will take place. This test would serve also to distinguish enlargements of the thyroid from aneurism. It is in point, here, to remark also, that the thyroid gland, when enlarged, does not destroy that characteristic outline of the neck made by the sterno-cleido mastoid muscle. This arises from the fact that the growth of the gland carries before it the omo-hyoid muscles, which are in front, and as these pass beneath the sterno-cleido mastoid muscles, the latter is elevated from the neck just in proportion as the gland increases in size.

Medical Societies.

TRANSACTIONS OF THE BROOKLYN MEDICO-CHIRURGICAL SOCIETY.

Special Meeting of June 11, 1861.

Daniel Ayres, M.D., President.

FIRST EXPERIMENT.

A young physician, W. R., offered himself to the interest of science as a subject for syphilitic inoculation. He was at the time twenty-four years old, healthy and robust, and never before infected with the disease. One of Wallace's methods was employed. By means of a small vesicatory (3″ x 2″) the cuticle upon the left arm was raised, the vesicle opened and under the epidermis on the 5th of January, 1852, matter inserted, taken from acne pustules in the frontal and superciliary region of Case No. 2.

Jan. 10th. No local effect, the blister is healing in the ordinary way.

Jan. 20th. Soon after the wound had healed, a papulous eruption appeared, accompanied with itching over the whole arm, as is not seldom the consequence of cutaneous irritation by blisters; the symptom passed of spontaneously.

On the 28th of January, a new irritation, redness and itching at the vesicated place was observed. On that day the redness was of a dark and coppery shade, and the vesicated place firm and infiltrated, more especially at one of the lower angles. At the same time some tuberculous eminences were recognizable. No pain.

Feb. 10. The vesicated place was covered with reddish brown, firm tubercles, grouped and covered with thin scales. Those that first appeared had thicker and darker scabs from the exsiccation of matter superficially formed.

Feb. 18th. (Forty-second day of inoculation.) Some of the tubercles much larger, projecting more, and are covered with laminified scabs resembling those of rupia. Below them there is suppuration. The cutis yet firm and infiltrated, particularly towards the margins of the vesicated spot. Some tenderness along the ascending lymphatics; some axillary glands painfully swelled.

An attempt was made with iodide of mercury (10 grains to the ounce,) to subdue the apparently still local symptom, and in the beginning, the attempt seemed to be successful. The tubercles grew rapidly smaller. The firmness of the skin evidently changed its consistency. At the end of a fortnight only the larger tubercles remained visible. After the ointment had been for sometime discontinued, a new increase of the symptoms took place on the 14th of March, being the seventieth day after the

inoculation. The infiltration increased again, and luxuriant, but dry tubercles, sprang up. Another attempt was made to arrest the constitutional invasion by applying a paste of chloride of zinc and starch. The slough removed the affected portion of the skin, and its detachment was accompanied by copious suppuration and healthy granulations. The cicatrization soon followed.

June 12th. Up to this day, which is the one hundred and fifty-ninth after the inoculation, and the one hundred and thirtieth since the first appearance of local symptoms, the patient had been constitutionally well. But now a general feeling of indisposition began, with a moderate gastric derangement, headache, and want of sleep. A week later a spotted redness about the tonsils and soft palate was noticed, which were soon covered with grayish white, apparently granulated exudation. Eventually those spots ulcerated superficially. A similar change was noticed also inside of the lower lip; another on the left of the frenulum lingue. The cervical glands were swelled. At a still later period, the scrotum became the seat of red infiltrated, secreting, superficial rhagades, (tubercules muqueux.) A treatment with corrosive sublimate and proper diet, effected in a few weeks (15th July,) a cure, and up to the 2(th November no manifestation of further trouble appeared.

THE SECOND EXPERIMENT

Was instituted upon Dr. Warnery, of Lausanne, who placed himself with laudable readiness at the disposition of Rinecker. Dr. W. was particularly well qualified for the experiment. He united with zeal a great minuteness in experimenting and observing. He was perfectly well and had never before suffered from syphilis, but had submitted to syphilization for a period of six weeks, when the thirteenth insertion was made. There he stopped the experiment. It should be remarked that each artificially produced chancre, was regularly destroyed on the fifth day after the inoculation. Since the last syphilization six weeks had elapsed, and as already stated, Dr. W. was perfectly well.

On the 13th of February the inoculation of secondary virus was performed in the same manner as in the previous case, the material being taken from the suppurating tubercle on the arm of W. R. The succeeding symptoms were pretty much the same as already described as in the first experiment.

On the 9th of March, (twenty-three days after,) the whole vesicated place was vividly red, the skin was hard and infiltrated with still firmer desquamating eminences. No pain.

March 21st. The local affection seemed to have arrived at its climax. There were numerous copper-colored grouped, partly confluent tuberculous eminences. Most of them were covered with brownish yellow and grayish white, tolerably adherent scabs and scales. At this juncture Dr. W. had to return home, and employed therefore the biniodide of mercury externally, without internal remedies, whereupon, after three weeks, every trace of the eruption had disappeared. From the middle of April to the beginning of May he felt completely well. Then, however, two and a half months after the inoculation, most intense headache commenced, which became unbearable, followed by general debility, anorexia, sleeplessness, and change of appearance. Almost simultadeously with those symptoms a lenticular syphilide was observed first at the back of the neck, whence it gradually extended over the scalp and face. Shortly after syphilitic sore throat commenced. The exudation connected therewith was but slight and superficial. In fine, broad, secreting condylomata sprang up on the usual places on the scrotum, inside of thigh and perineum, toward the anus.

Dr. W. with admirable coolness allowed all these symptoms to develope themselves for many weeks, and not before July he commenced treatment. The several affections soon receded, and on the 11th September Dr. Rinecker paid Dr. W. a visit, and found him completely restored.

THIRD EXPERIMENT.

On the 7th of March, matter from under the scabs of Dr. Warnery's arm was taken and inserted into the arm of a boy twelve years old, who was treated for chorea at the hospital. The results of the inoculation developed themselves pretty much in the same manner as in the other experiments. Local reaction appeared on the 27th day in the form of an indolent tubercle, covering almost the entire vesicated space. Its surface, first dry, soon became superficially eroded and secreting, and subsequently covered with laminated scabs. Without treatment of any kind, it had fallen off, and presented, on the 12th of May, a slightly depressed cicatrix. In this case it did not come to the development of constitutional symptoms.

Prof. Rinecker, from his own, from Wallace's and Waller's experiments, draws the following conclusions:

1st. The local results from inoculation with secondary virus, appear never before a fortnight, often after four weeks. Prolonged inoculation is, therefore, characteristic of secondary infections.

2d. The primitive symptoms of inoculation remain for a long time, develope very slowly, and are still extant at the appearance of constitutional symptoms.

3d. The form in which the primitive symptoms develope, is that of cutaneous tubercles, with a tendency to superficial ulcerations. The neighboring lymphatic glands become involved in most instances.

4th. The general symptoms commence scarcely ever before the fourth week, mostly at a later period, and after the first local reaction.

5th. The general symptoms indicate a total impregnation of the system, and affection of the constitution analagous to any infection with animal poison.

6th. The forms in which the general infection manifests itself, are themselves greatly diversified. They are onaculae, sometimes papulous, flat condylomata, sore-throat, form of plaques mureux.

7th. The well-established fact that the contagion is reproduced in the general symptoms, and may be effectually inoculated upon individuals in whom the

virus has either not yet been introduced, or whose disease has been effectually instigated by appropriate remedies.

Meanwhile, Baulland had brought the subject once more before the Imperial Academy of Medicine, and had insisted upon the appointment of a commission to prepare it in a tangible form for discussion and final decision.

But years passed by without a report from the committee. The subject might have rested in silence forever, but for Auzias Turenne, who succeeded in influencing the Minister of Public Instruction to submit the following questions to the Academy:

1st. Are the affections of constitutional syphilis contagious? And,

2d. Has the product of hereditary syphilis of infants, as regards its contagiousness, other qualities than constitutional syphilis of adults.

The request of a speedy answer from so high an authority could not be disregarded. Ricord's influence and position in the Academy had to yield to the authoritative demand.

The Academy promptly appointed a Committee, with Gibert as Chairman, who reported, on the 24th of May, the result of its investigation.

The report of Gibert begins by saying that the submitted questions had already been affirmatively answered by most practitioners. Hunter, and more recently, others, had attempted, by means of inoculating syphilitic virus, to throw a doubt upon clinical observation. The new school had, in toto, denied the contagiousness of constitutional syphilis; the adherents of its contagiousness had answered by clinical facts. Of late, however, Wallace, Waller, Rinecker, Velpeau, Vidal, Bouley, and others, had proved by the same means "that secondary syphilitic affections were transmissible upon individuals not yet affected."

He had questioned the necessity of instituting experiments of the same character in the face of facts so indisputable and so satisfactory to unbiassed minds, and, moreover, he (Gibert) had great aversion to inoculating healthy individuals. In consideration, however, of the obstinate and persistent denial of the opponents, he had felt himself forced to enter upon new experiments.

As had been expected, he had obtained the very same results, and arrived at the same conclusion as Rinecker, in 1852.

The difference between primary and secondary syphilis, whether acquired or inoculated, Gibert summed up as follows: in the former, quick incubation, pustular beginning, followed by ulceration and induration; in the latter, there was protracted incubation from eighteen, to twenty and more days, papulous beginning, and subsequently ulcerative and crustaceous forms.

Next Gibert entered upon the details of his four experiments which he had instituted, together with Auzias Turenne, under the supervision of the members of the Committee.

One case was so far remarkable, as the inoculation had produced but a single scab, and had, consequently not the remotest resemblance to a Hunterian chancre, as insisted on by Ricord and Rollet.

With regard to the second question, Gibert thought that he had answered it already in answering the first. Clinical facts were as numerous and conclusive as in adults. Many practitioners had recorded observations of transmission of the disease from sucklings upon wet-nurses, and its extension upon others. There was no reason to suppose that the virus followed other laws of communication, or was more or less intense than in adults. And, finally, M. Gibert proposed to return the following answers upon the ministerial questions:

1st. There are symptoms of secondary syphilis which are undeniably contagious.

2d. This is true, also, with reference to constitutional syphilis of infants upon wet-nurses, and there is no reason to presume that the disease possesses a different character in infants from that in adults.

This proposition was approved of by the Academy, after a short debate.

The discussion was opened by Ricord himself, who had been a member of the committee, but had preferred to present a special report, to signing that of the chairman. The former contained, however, but repetitions of his well-known views, and was intended to throw new doubts upon the subject. He stated, as a special plea, that he had instituted the inoculations upon patients only who had been already affected with the disease. According to his clinical observation in a most extensive practice, he had been almost always able to trace the syphilitic affection to a primary chancre, and in those few cases in which this had not been directly possible, good and rational reasons had existed for presuming such an origin. He would not deny that he had taught the transmissibility of secondary syphilis upon patients already invaded by that disease; yet, in regard to its communicability upon healthy individuals, he had expressed himself with great reservation.

Toward the end of the debate, in which the most prominent members of the Academy participated, Ricord, himself, admitted the conclusiveness of the facts stated, inoculations of secondary syphilis, and thus the question was finally settled.

Your Committee has purposely given this historical sketch in order to show that the question has been discussed for the last twenty years, and has been answered in the affirmative by conclusive clinical observations and experiments. The parties engaged in the elaboration of the subject, unite the highest reliability and respectability.

Their position is unassailable, and can scarcely be rendered stronger by new experiments or further investigation.

Your Committee might have simply reported to the Society, and referred to the proper literary sources, and asked for their discharge; but the circumstance that the inquiry on this subject has chiefly been carried on in France and Germany, and its results published in foreign languages not accessible to every member of the Society, and furthermore that English and American literature had almost entirely lost sight of the final settlement of a question so important to hygiene, forensic and practical medicine, these considerations have induced your Committee to collect material bearing upon the subject.

In conclusion, your Committee considers itself fully sustained by clinical and experimentative facts, to report, in answer to the submitted question:

"That secondary syphilis is both communicable *by contact and by inoculation.*"

As to the conditions and the mode in which the constitutional syphilitic virus may be communicated, your Committee do not deem it proper to extend their labors beyond the lines drawn by the Society. This, in itself would be a subject for special inquiry.'

Louis Bauer, M.D., *Chairman.*
Frederick Morris, M.D.
Julius Homberger, M.D.

On motion of Dr. Burge, the Committee's report was accepted, with the thanks of the Society, and the subject laid over to the next meeting for discussion. In order, however, to give it a still wider range and extend its discussion, to the condition under which secondary syphilis was to be transmitted, and the forms which are especially susceptible to communication.

It was moved and carried, that the aforesaid Committee should be continued, with the addition of Drs. Whaley and Willets.

BERKSHIRE (MASS.) DISTRICT MEDICAL SOCIETY.

We find in the Berkshire *Medical Journal*, the following graphic report of that Society, which held its meeting at Pittsfield, on Wednesday, May 22d; Dr. C. T. Collins, President, in the Chair. The Secretary being absent, Dr. H. M. Holmes was appointed Secretary, pro. tem.

The prevailing epidemic of scarlatina, following in the wake of diphtheria, and presenting anomalous forms, apparently from a complication with that disease, was discussed by Messrs. Brewster, Smith of Pittsfield, Parks, Root of Stockbridge, and Lucas.

Dr. Brewster had treated cases of scarlatina in which the rash was darker and more isolated than in its ordinary forms, accompanied with exudation on the fauces and great prostration—had used the warm bath, diaphoretics and stimulants.

Dr. Smith's cases had presented such characters that in the absence of the rash he would have called them cases of diphtheria—they were attended not by a pultaceous pharyngitis, but with a membranous formation on the tonsils and pharynx; had used tonics, stimulants, and chlorate of potash, with favorable results.

Dr. Parks had employed belladonna as an anodyne, and chlorate of potash.

The testimony of the society as to the supposed prophylactic powers of belladonna against scarlatina, was that the drug possessed no such virtue.

Dr. Root had seen rheumatism supervening on cases of scarlatina which presented the pharyngeal symptoms and prostration of diphtheria.

The treatment of rheumatism was discussed by Messrs. Smith, Evans, and Holmes.

Dr. Smith had used a mixture of iodide of potassium and colchicum, (tinc. colchici a fluid drachm, iodid. potass. grs. xv., every six hours,) with great benefit, in cases in which the alkaline treatment had proved of no utility; treated topically by bandaging and alkaline lotions.

Dr. Evans employed the muriate of ammonia in doses of thirty grains, with great success; did not believe that lactic acid was the cause of the disease, as he did not believe that fibrin was a cause of inflammation; thought the liability to metastasis gave evidence that nervous disorder was an important element in the disease—administered the muriate of ammonia not as an alkali, but as a nervous stimulant; has derived great benefit from bandaging.

Dr. Holmes also spoke favorably of the employment of iodide of potassium and colchicum, with tonics, in the treatment of rheumatism. Dr. H. had treated uncomplicated asthma, with iodide of potassium, with favorable results.

Drs. Duncan and Collins recommended the inhalation of ether during the paroxysm. Dr. D. recommended Nichols' and Squibb's preparations, particularly that of iodide of lime, as a substitute for iodide of potassium.

Dr. Cady reported a case of a lad eight years old, attacked first with diphtheria, next with rheumatism, upon which cardiac disease and dropsy had supervened. Now convalescent under digitalis and tonics.

Dr. Lucas recommended tinc. lyttæ, with iodide of potassium as a diuretic in anasarca from cardiac disease.

The Society adjourned to dine at the Berkshire Hotel.

MEDICAL MISSIONARY HOSPITAL CLINIC AT CANTON, CHINA.

Reported by John G. Kerr, M.D., of Canton.

The new wards for the reception of in-patients, were ready in April, and since that time 206 have been received. Many of these were surgical cases, and subjects of important operations. More than 250 operations of surgery have been performed during the year; among these we note the following:

GUN-SHOT WOUNDS.

The patient, from Tung-kun District, a man thirty years old, was shot in the right thigh five years ago. The place where the ball entered was closed, but a large fistulous opening existed on the inner part of the thigh. The track of the fistula was four or five inches long. The knee-joint was stiff from the thickening and condensation of the tissues on the front of the thigh. The position of the ball could not be ascertained. An incision was made to meet the end of the fistulous track, but the bullet could not be found. After this incision had healed, another, six inches long, was made through the condensed

tissues down to the bone. An iron ball was then found resting on the bone, which had been the cause of uninterrupted suffering for so many years. The wound healed rapidly, and in a few days the discharge from the fistula ceased. The patient soon recovered his health and spirits, but the stiffness of the knee-joint remained, and must continue for several months.

Another case, similar to the above, was operated on April 28th. The patient had been shot by pirates two years before. The bullet entered near the middle of the left thigh. A fistulous opening remained at the point of entrance, and communicated with several sinuses extending toward the knee and on the outer aspect of the limb. The discharge of matter was so great as to weaken the patient very much. The most careful examinations did not detect the position of the bullet. An incision, two inches in length, was made at the opening, so that the finger could be introduced into the sinuses. When we were ready to give up the search as useless, a small bullet was discovered in a cavity on the outside of the limb. At the end of three weeks, the discharge had ceased, the sinuses were healed, and the patient was discharged cured.

TUMOR OF THE NECK.

A man, named Siu A'ng, twenty-six years old, from the District of Kau Yau, had a tumor on the left side of the neck. It began about seven years ago, at a point near the middle of the side of the neck, and extended in every direction, until it occupied the space from the lower jaw to the collar-bone, and from the median line in front to the back part of the neck. Assisted by Drs. Purcell and Wong Fun, the tumor was removed on the 19th of April. It was found to involve the deep structures of the neck, and, in the dissection, the carotid artery was laid bare. The venous hemorrhage was considerable, but no artery required to be tied. When removed from the table, the patient was very much exhausted, and for forty-eight hours he was threatened with suffocation from swelling near the windpipe; but, on the third day, a favorable change occurred, and he steadily improved, so that he was able to walk out on the eighth day. In about twenty days, the wound was closed, and he returned to his home in the country. Near the end of the year, this patient presented himself again, with a return of the tumor at the lower part of the neck. It was not deemed prudent to attempt excision, but the sebaceous contents were removed, and tincture of iodine injected, with the hope of arresting its further progress.

FATTY TUMOR.

The patient was a man thirty-two years old, from the District of Hai Ping. The tumor made its appearance ten years ago; but at first it increased slowly. During the last year or two, it had been growing rapidly, and had attained an inconvenient size, and covered a space between the shoulders of five or six inches in diameter. It was removed November 15, and weighed two pounds and one-quarter. Drs. Dods and Eastlack rendered valuable assistance in this case, and also in an operation for stone performed the same day.

SARCOMATOUS TUMOR.

A female, thirty-six years old, from Fuh shan, was admitted with a tumor on the left side of the abdomen, extending obliquely toward the right side. One end was pendulous, and about four square inches of the surface were ulcerated. The patient was emaciated, anemic, feverish, and had no appetite for food. Notwithstanding the unfavorable state of the case, it was determined to operate, and the tumor was removed May 1st. The feverishness continued several days after the operation, but yielded to the use of quinine, and then her health and strength began to improve. At the end of three weeks she was able to sit up, and the wound was almost closed. She left the hospital, in July, relieved of a loathsome burden.

TUMOR OF THE FOOT.

A young man, twenty-four years old, from Sing-hing District, had a tumor on the upper surface of the foot, growing from the root of the toes backward to the ankle. The posterior part was movable, but the end toward the toes was firmly fixed. The operation was performed September 1st. The tumor was lobular, cartilaginous in structure and of almost bony hardness. It was insinuated between the bones of the foot, so as to make its removal exceedingly difficult, and the attachment to the bone of the second toe was so firm that it became necessary to remove the toe with the tumor. The extensor tendon of the third toe was involved, and a portion of it was removed. After the removal of the head of the second metatarsal bone was cut off with bone forceps, so as to allow the remaining toes to be brought close together. The parts united, and the wound closed up without any unfavorable symptom.

A man named Lai Ahing, aged thirty-nine years, from Tung Kwan District, was admitted with a small *ulcer*, three inches above the ankle. His general health was good, but the ulcer resisted all efforts to heal it. On a more careful examination, a foreign body was found in the calf of the leg which was the cause of the disease. An incision was made in the middle of the calf of the leg, where the point of the foreign body could be felt, and a piece of bamboo, three inches and a-half long, sharp at one end, and half an inch wide at the other, was removed. The patient was not aware of the presence of any foreign substance, although

it must have been there for about a year. After its removal the ulcer closed up without difficulty, and the usefulness of the man's leg was restored.

A man named Tam Apui, aged twenty-three years, from Tung Kwan District, was admitted in September. He had *caries of the right humerus*, which he attributed to an attack of fever six years ago. A portion of the shaft of the humerous was separated, and projected obliquely through the muscles and skin. It had been in this position for more than two years, keeping up a constant discharge of matter through several fistulous openings. It was easily removed with a pair of forceps. The fragment was four inches long, and half an inch in diameter. There was shortening of the arm, and anchylosis of the elbow joint. Soon after the removal of the dead bone, the fistulous openings closed, greatly to the relief of the patient, but the stiffness of the arm remained.

A man named U Atai, thirty-six years old, had *caries of the lower jaw*, resulting from diseased teeth. There were several fistulous openings discharging unhealthy and offensive matter, both internally and externally. By simply enlarging the openings, a number of fragments of dead bone were extracted, amounting to a fourth of the lower jaw-bone. After their removal the abscesses and fistulas healed very readily.

EDITORIAL DEPARTMENT.

PERISCOPE.

REMARKABLE CASE OF INJURY BY LIGHTNING.

The following report of an inquest held on the body of a woman, who was killed by a stroke of lightning, appears in the *Lancet:*

"It appeared in evidence that the deceased and her husband were overtaken by the storm which prevailed over the country some miles westward of the metropolis. They were standing together under an umbrella by the side of a lane, close to a ditch, and beneath the shelter of two elm-trees, when the wife observed, "Well! it seems to be clearing off; we may as well go." He recollected nothing more, until he found himself lying in the ditch, and his wife dead beside him. How long he had remained in a state of insensibility he did not know, but he immediately proceeded to Hampton, where he arrived about eight o'clock, and procured the medical assistance of Mr. Jepson, and a vehicle for the removal of the body of his wife, which was forthwith conveyed home. The electric fluid had tattered portions of the woman's clothing, and had rent, in a zigzag manner, her right boot, near the toe-part of which was a small hole, about the size of a crow-quill, through which it had evidently passed into the earth on which she was standing.

"The escape of Keen himself had in it something miraculous. The lightning had struck his neck on the right side, where it inflicted a sore which was seen at the inquest. Proceeding thence, it had riddled his shirt as if with shot, and had passed along a metal guard which he wore attached to his watch underneath his waistcoat. His right brace was seen blackened along the course over which this guard had lain upon it. The lightning had then cracked, in several parallel lines, the glass of his watch, which was in a fob, and had indented in two opposite places the circumference of the watch-case, leaving the works of the watch uninjured, as was proved at the inquest. It had then penetrated his right pocket and his purse, in which it had indented a half-sovereign and a half-crown, blackened a florin, and passed out at the bottom of the purse by a hole nearly similar in size to that in the foot of the woman's boot. It had then seared his right thigh as it had his neck, and finally emerged by a hole in his small-clothes above the knee. How it was that after such a shock he should have remained at most only from ten minutes to a quarter of an hour insensible, as proved by the time he was seen at Hampton, and then have been able to proceed to procure assistance to the dead body of his wife, is inexplicable."

CONCEALMENT OF A BURGLAR'S INSTRUMENTS IN THE RECTUM.

The Paris correspondent of the *Lancet* relates the following remarkable affair:

"A curious case recently brought before the Society of Surgery throws some light upon the mysteries of the Bagnio, and illustrates the desperate nature of the expedients to which the galley-slaves are in the habit of resorting, in order to elude the vigilance of their goalers. A convict at the prison of Vannes, in Normandy, condemned to fifteen years of hard labor for robbery, was suddenly seized with colic, vomiting, and fever, accompanied by obstinate constipation. In the presence of these symptoms of intestinal obstruction, search was made for a hernia, but none was found. The prisoner, aware of the gravity of his state, and hard-pressed for some explanation as to the origin and cause of the disorder by the attendant physician, confessed to having been in the habit of secreting within the cavity of the rectum the money he happened to possess. An examination of the lower bowel, first by the finger, and then by a long pair of forceps, threw no light upon the case; the intestine was empty. The peritonitis daily gained ground, and the patient, evidently sinking, was again urged to give some more satisfactory clue as to the source of the disease. He now somewhat modified his previous statement, and said that he had introduced into his rectum, a few days previously, a

cleft stick, which he used as a *porte-monnaie*, and that in the hurry of a sudden alarm, the pointed end had been inserted foremost, in lieu of the blunt extremity. The left hypochondriac region was then carefully explored, and towards the upper part of the *descending* colon, a voluminous tumor was discovered; this corresponding with the point of the obstruction. Towards the end of the seventh day the man died, and the autopsy revealed the following: The usual post-mortem signs of acute peritonitis—serous effusion, false membranes, enormous distension of the intestines by flatus, and, moreover, the existence of a foreign body of considerable size and weight, occupying the *transverse* colon. This body, on its withdrawal from the intestine, proved to be a substantial metallic case, of cylindrical form, eveloped in a piece of bladder, and possessing a conical extremity, which pointed upwards, i. e., towards the cæcum. When stripped of its covering, the cylinder, which weighed one pound five ounces, was found to be a case or tube, in hammered iron, closed at one end, and provided with a cover at the other, six inches and a quarter in length, and two in diameter. Within were found an iron tube; part of a gun-barrel four inches long; an iron screw and nut; a turnscrew; two small saws, one for wood, the other for cutting metal; the drill of a centre-bit; a file; a piece of two francs, and four pieces of one franc, together with a lump of grease—a complete thieves' arsenal. On a closer examination, it was ascertained that these instruments, united by means of the nut and screw, could be made to form a powerful lever, capable of wrenching asunder the bars of a window-grating, and thus affording the means of escape; Thanks, no doubt, to the possession of this portable "jimmy," this very convict had, on a former occasion, and when imprisoned in the goal at Brest, been enabled to regain his liberty. The medical interest of the case lies, of course, entirely in the acquired tolerance of the rectum for so enormous a suppository, and in the manner in which this capacious iron cylinder had travelled along the intestine, upstream, and against the peristaltic current, and rounded the corner of the transverse colon, in spite of gaseous distension and muscular opposition. According to the experience of the turnkeys of Vannes, the concealment of contraband articles, by insertion into the rectum, is almost universal amongst the convicts, and the little conical boxes, carried for the purpose by the galley-slaves, are commonly known amongst themselves as 'nécessaires.'"

POISONOUS MUSHROOMS.

At a recent coroner's inquest at Ipswich, England, the jury gave verdict:—"Death caused by eating poisonous mushrooms;" and recommended that great caution be exercised by persons eating this article. Dr. A. S. Taylor, in his work on Medical Jurisprudence, says "there do not appear to be any satisfactory rules for distinguishing the wholesome mushrooms from those which are poisonous, and, in some persons, even edible mushrooms will produce disorder of the stomach and bowels."

The English *Gardiner's Chronicle*, alluding to the above case, remarks that not only is it difficult to distinguish the wholesome from the poisonous mushrooms, but that there are other families of plants, a portion of which may be eaten with impunity, while others are injurious, as, for instance, the Brazilian Cherry (*Physalis Peruviana*) and the Deadly Nightshade, both of which belong to the solanacea or potato family.

The discrimination of wholesome from unwholesome productions of this class is a matter of experience, and no one is safe in the use of any vegetable substance whatever without such a degree of information as shall preclude all reasonable chance of error.—*Am. Agriculturist.*

OINTMENT OF THE BENZOATED OXIDE OF ZINC.

Dr. Erasmus Wilson, the writer on diseases of the skin, says that this ointment is the best local application for all chronic inflammations of the skin. It is cleanly and agreeable, and has a tendency to concrete upon the skin and form an artificial cuticle to an irritated and broken surface. It is made by selecting the best and most fragrant gum benzoin tears, adding them to lard in the proportion of ten grains to the ounce, and the whole digested in a water bath for about forty-eight hours; this is then strained and mixed thoroughly with ten grains of white oxide of zinc.

Movements in the Sick-Room.—A firm, light, quick step—a steady, quick hand—are the desiderata; not the slow, lingering, shuffling foot—the timid, uncertain touch. Slowness is not gentleness, though it is often taken for such. Quickness, lightness, and gentleness are quite compatible. Again, if friends and doctors did but watch, as nurses can and should watch, the features sharpening, the eyes growing almost wild, of fever-patients, who are listening for the entrance from the corridor of the persons whose voices they are hearing there, these would never run the risk again of creating such expectation or irritation of mind. Such unnecessary noise has undoubtedly induced or aggravated delirium in many cases. I have known such; in one case death ensued.—*Florence Nightingale.*

The Cruelties of French Vivisection have excited much comment of late and a Committee of the London Society for the Prevention of Cruelties to Animals has waited on the French Emperor with a memorial on the subject, particularly in relation to the Veterinary School at Alfert.

THE MEDICAL AND SURGICAL REPORTER.

S. W. BUTLER, M. D.
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MONTHLY NURSES.

The subject of Nurses and Nursing is just now undergoing a thorough discussion among both Medical and Secular Journals. Its importance is rather overrated. The energy and philanthropy of Florence Nightingale, introduced a new era in army nursing. The horrors of the Crimean war were, doubtless, greatly mitigated by the outgushing of woman's sympathy, which exhibited itself in her tender attentions to the sick in that campaign. Most truly has she been denominated an angel of mercy, as with firm, light, elastic step, a steady, quick hand, she glided among the sick or wounded soldiers, ministering to the pressing wants of each. What she was to the English army, so doubtless, will our own Miss Dix prove to be to our own army. A new sphere is thus opened for the exercise of that warm sympathy, which woman only can exhibit, and those delicate attentions which she only can show; and most nobly has she responded to the call thus made, until more have volunteered their services than the wants of the army require, or there are places to fill.

But not every woman is qualified for the station of nurse without some instruction. There are but few Miss Nightingale's or Miss Dix's in the world. Hence the necessity thus made apparent for a thorough system of training, which, in voluntary associations for the purpose all over the land, is now likely to be given.

But it was not for the purpose of commenting upon a system of nursing for the army that we commenced this article. We had in view not so much the clash of arms, and the sad results of conflict between opposing armies of men, as another epoch in the history of our race, when weak and helpless, the first breath of life begins; when both the mother and the new-born offspring need the tenderest and most assiduous care; and when, perhaps, the life of both depend upon the intelligence and efficiency of the nurse. What physician, of large obstetrical experience, has not known instances, in which the saddest results, in sickness and death, could be traced directly to ignorance of the simplest offices required of, or entrusted to the nurse; offices which the nurse only was at hand, or expected to perform. The patient may fall in labor, and delivery take place before the doctor can arrive. Here the intelligent nurse will be able to save the life, perhaps, of both mother and child. In the hands of the ignorant both may perish. Or, perhaps, as is not unfrequently the case, the last efforts of the expulsive stage may be mistaken for a pressing call for defecation, and the patient be permitted to sit upon the night stool, and the child thus perish by suffocation, as many no doubt have; or the child may be born with the cord about its neck. The intelligent nurse, in each of these conditions, will understand precisely what is necessary to be done, and apply the appropriate remedy at the proper time. But the nurse needs some instruction. It is not a sufficient qualification that she is herself a mother, that "she has gone through with it all herself." Experience is a good schoolmaster, but the vividness with which the parturient pains are remembered, does not always qualify the nurse for an unexpected emergency. Another kind of training is absolutely indispensable. It is not enough that she should know how to wash and dress the child. She ought to know something of the elements of midwifery; something of the structure of her own system with reference to the maternal function; something of the accidents and attendants of parturition; something of the peculiarities and dangers of child-bed; something of the functions of the new born child, and of the appliances sometimes necessary to strengthen its frail hold upon its new existence. This necessary knowledge may be acquired gradually, as the result of a long experience, but it may be at the cost of life in those first entrusted to her care.

For the army, trained nurses are required. No applicant is now admitted to that important station, unless she has undergone a previous thorough education; and this thorough training is acknowledged to be a public necessity; and rightly too. Those in whose hands are

placed, in a sense, the "issues of life or death" in the sick and the wounded, ought, by all means, to be well instructed for their responsible task.

If, then, such be the acknowledged requirement in army nurses—and we would elevate the standard of qualifications here instead of lowering it—is it of any *less* importance that those who nurse the woman in child-bed, the mother of future civilians, soldiers, statesmen and kings, shall, also, be thoroughly qualified? Here the delicate attentions of woman are, at times, alone admissible. The safety of the patient and her offspring depends, perhaps, upon the proper performance of these very attentions. Is not the requirement then the more imperative, that the nurse shall have the knowledge she is required to exercise? We have our associations for the proper education of army nurses. Why not, also, not only in the city but in the country, the means of instruction for those who would gladly qualify themselves to become invaluable assistants, not only to the accoucheur, but, also, to the woman in child-bed.

Here, we are confident, is a branch of the important department of nursing which has been sadly overlooked and neglected. Under the impulses of patriotism, or as the spontaneous outburst of woman's overflowing sympathy, a board of army nurses has been organized, and thousands are enrolling themselves in the list for this necessary service; nay, vieing with each other which shall do most to mitigate the horrors of war, by kind and tender attentions to those who experience its dreadful results. This is all well, but the other should not be neglected. The voice of humanity should be heard above all the din of battle, or the promptings of patriotism, or the expectation of a high niche in the monument of Fame, bidding woman to qualify herself, also, to be the nurse of her own sex, in that most important, trying, and interesting crisis in her history.

And here we would not be understood as advocating the employment of females as *accoucheurs*, (though, in many cases, the attendance of the intelligent nurse may be all that is required,) we only urge the importance of their thorough training as *nurses*, thus enabling them to become most valuable assistants to the obstetric physician. As a nurse, thoroughly qualified, her services will be appreciated, and invaluable; as accoucheur, the tender sympathies of her nature may unfit her for proper and intelligent action when most required, and her well intended efforts prove injurious rather than beneficial.

CITY HYGIENE.

In these days, when the scorching rays of a meridian sun are searching out the neglected nooks and corners of our cities, converting every cast-off vegetable, or animal fragment into a pestiferous source of malaria, filling the air with as many "stinks" as Coleridge counted in Cologne, surely no one will question the duty of medical men to direct public attention to these fruitful sources of disease, and to urge entire and most rigid cleanliness, as an important means of preserving the public health.

As one of the arrangements in city life, seriously annoying and decidedly offensive, we refer to the carting away of refuse of all kinds in the day time. Each house has a receptacle for its offal, which in a very brief space of time becomes offensive. From these receptacles, these putrefactive materials are taken in broad day light, carried upon the side-walk, to the exceeding annoyance of pedestrians, and poured into carts, often splashing their offensive contents upon the passers by; or allowed to sit upon the curb, compelling the passer to give it a wide berth, for fear of contamination, or occasionally tipped into the gutter, until the city cart shall come round in its daily tour. Or, if possible, still worse, if the contents of the receptacle be the refuse of the coal range, the air is filled with the fine dust of the coal, and the foot passenger is compelled to breathe an atmosphere impregnated with it, besides receiving it upon his garments. Or, perhaps, one of these coal-ash carts will fall in upon the city railways, just in front of the car, and, aided by a fresh breeze, in just the right direction, annoy the passengers by filling the car with the dust.

And then, again, the surface of the streets often alternates between a dust and a mud. Without previous careful sweeping, and thor-

ough removal of the mixture of dirt and filth from them, water, from the hydrants, is lavishly laid on, or the huge water cart is trundled about, laying the dust indeed, but leaving the filthy mass to putrify in the rays of the sun. Or, if the street-sweeper has performed his duty, and gathered the dirt and filth into stacks, it is sometimes left to seethe and ferment, generate and throw off its odors, during the whole day.

And then again, the drains, running as many of them do, in an indentation of the side-walk, and carrying along effete matters upon the bosom of the discolored waters, to be drifted away to a common sewer, if the force behind be sufficient, or continued long enough to accomplish it, or to accumulate and rot, if there be not, are they not fruitful sources of disease and death? Frequently, as we have passed along the side-walk, has the effluvia from these drains almost cut off our breath, and compelled us to hasten our footsteps.

These things ought not so to be. The city carts should perform their labor in the night time. The offal of the city should be collected when there are no pedestrians to be annoyed by it. The street sweepers and the dirt carts should have their duty all nicely performed ere the sun's rays light up the hill tops; and when the grateful sprinkler trundles along its slow measured step, it should be to shed upon us the grateful coolness of pure water upon a clean pavement, and not to cause what is intended as a blessing, to enter into the composition of a noxious compound, pregnant with malaria and death.

"If we are asked," says the *Medical Times and Gazette*, "to define the peculiarities of London air, they consist in the effluvia from the uncleansed streets; the effluvia from the dust-bins in the areas of houses; the effluvia from sewers and gully holes, and those hateful 'ventilating' openings in the centre of the streets; the effluvia from mews, stables, and cow houses, and from the immense quantity of sulphurious gas burned."

One would almost imagine the *Times* to be speaking of Philadelphia or New York, but it is only describing the air of London. If, however, it should be taken as having any application to either of these great centres of commerce and influence, it may be consoling to quote further: "All these sources of impure air are capable of mitigation," so that if city officials do their duty faithfully, the air of both these cities may be *ceteris paribus*, as fragrant as the breath of morning.

EDITORIAL NOTES AND COMMENTS.

THE PROPRIETY OF PROMPT OPERATIONS IN DECIDED CASES OF STRANGULATED HERNIA.

The frequent occurrence of death after the operation for strangulated hernia, when the duration of the case prior to the operation has been protracted, and the rarity of death when the operation has been promptly performed, is the experience of all surgeons. It is no uncommon thing for practitioners to allow the most violent symptoms of strangulation, after repeated taxis has failed, to continue without a resort to the operative procedure, until dissolution is imminent. The violence of the efforts, particularly in recent cases of hernia, is also exceedingly reprehensible, and tends much to increase the mortality. We have in two instances seen the contents of an omental hernia disorganised and crushed into a pulpy oily mass by rude and prolonged efforts at taxis. It should be more generally comprehended by practitioners that the operation for hernia, before the strangulation has continued many hours, and before manipulation has irritated the parts, is almost entirely devoid of danger, and that if the operation were performed within the first twenty-four hours nearly all would recover. In our own experience of sixteen operations for strangulated hernia, those which were performed within fifty-six hours from the first active symptoms of strangulation were successful. Four cases which had exceeded that period were fatal.

The statistics of the operations for strangulated hernia during seven years at St. George's Hospital, published in the London *Medical Times and Gazette*, argue strongly in favor of these views. The reporters of those statistics make the following pertinent remarks:

"These facts tend to show that the mortality in femoral hernia is due almost entirely to the negligence of the patients, and, we regret to have to add, to the ignorance and apathy or to the folly of their medical attendants. At St. George's Hospital, the rule is, and has been for a long period, to operate very early; and in

femoral hernia, either not to attempt taxis at all (should the stricture be very tight) until the patient has been put under chloroform in readiness for the operation, if necessary; or, at any rate, to confine the taxis to the most moderate efforts. Were patients generally aware of the great danger of delay after the occurrence of symptoms of strangulation, and were their medical attendants to act as though they were convinced of the risk of injury which the gut runs by prolonged detention in the hernial sac, and more particularly by the rough handling it is too often subjected to, the mortality after herniotomy would be reduced to a very low figure. Unfortunately, we still frequently see cases sent to an hospital after many days' strangulation, in which medical men have made daily and often prolonged attempts at reduction. The general rule in strangulated hernia, especially of the femoral variety, ought to be—operate at once, after the first failure of the ordinary methods for reduction. To this rule, of course, exceptions must often be made, as in inguinal herniæ, where the symptoms are slight; but in the femoral, and where the stricture feels very tight, or in any class where the vomiting is urgent or the symptoms of peritonitis clearly marked, it should be made absolute."

The Paris correspondent of the London *Med. Times and Gazette*, says, that Dr. De Saull has recently brought to the notice of the profession a dyscratic disorder which has not been described, and which may be called "the dyscrasia of coffee-house visitors." It is well known that a considerable number of Frenchmen have their real home in *cafés* and estaminets, where they eat, sleep, gamble, and often die. It is especially these *habitués* of the coffee-houses that, and of course not occasional visitors, who are liable to the disease. The tea and coffee, with the conversation, produce an abnormal excitement, but it is chiefly the air, which is contaminated with tobacco smoke, the production of the combustion of gas, and the exhalations of carbonic acid and ammonia by the visitors, which have the most pernicious effect on the health. This is especially the case during the cold season, when all ventilation of the rooms in the coffee-houses is neglected, and when the rooms are most crowded.

The prominent symptoms are said to be loss of appetite, constipation, flatulence, withered aspect of features, photophobia, loss of olfaction, decrease of sexual power, loss of memory, asthma, intermittent pulse, and numbness of limbs.

During the early stages of this peculiar affection, a retirement from *cafés* is often sufficient to produce relief. Military officers, who are garrisoned in small towns, and who spend almost the whole day in coffee-houses, are said to be the most frequent victims of the dyscrasia.

A New Cause of Death.—The *Lancet* mentions the sudden death of a young woman from congestive apoplexy as caused by "*Red Tapeism.*" Her removal to the Sydney Infirmary had been directed the day before, but was delayed by the routine which had to be gone through.

It is not long since a beautiful young woman and her babe both fell victims to the same disease, if so it may be called, in our own city. She was the wife of one of the soldiers who has gone to the war, and day after day she had made application to a city committee for relief. Too modest or too weak and sickly to press her own claims, with the pertinacity of her more masculine associates in poverty, and for want of a required formality, aid was withheld, and soon the woman and child, no longer haunted the avenue to the committee room. In a short time she was found at a filthy place in Dock street dying from hunger, her babe already dead upon her breast. We gather these facts from *The Press* of June 20.

The London *Med. Times and Gazette*, says, that in reply to the circular of the Boston Society for Medical Improvement, Dr. Kidd has sent to the Secretary the particulars of thirty-six deaths from inhalation of sulphuric ether, two from inhalation of nitric ether, and two from amylene. Dr. Kidd agrees with M. Trousseau, that ether is one-third more safe than chloroform as an anæsthetic.

We suppose that these thirty-six deaths recorded by Dr. Kidd, have all occurred in Europe, where ether has been comparatively but little used, and chloroform has been the ordinary anæsthetic; and it seems remarkable that in this country, where ether is the prevailing anæsthetic, that there should have been an entire immunity from mortality from it, whereas the deaths from chloroform have been very numerous.

The London *Lancet* is about to publish a new series of investigations relating to the adulteration of articles of food and drink. It published the results of a similar investigation nearly eleven years since, which created a

great sensation, and resulted in showing the prevalence of a gigantic and almost universal system of fraud, by which the community "were robbed, starved, and poisoned with impunity." We shall watch the progress of the investigation with interest.

The Dismissal of Pirogoff.—Professor Pirogoff, the eminent Russian Surgeon, has been summarily dismissed from his chair in the University of Kiev, simply because he proposed the institution of a special tribunal to which the Students of the University should be amenable, independently of the civil police. This course, the *Lancet* says, is the custom in that country when a subordinate dares to dissent from imperial orders, or to think for himself on matters of administration.

We stand corrected by our Boston correspondent and by our cotemporary, the Boston *Medical and Surgical Journal*, in regard to the existence of such an institution as a "Medical Benevolent Society." "The Massachusetts Medical Benevolent Society has been in existence several years, and is at present in a flourishing condition, having a long roll of members and a rapidly increasing fund."

A writer in the *Lancet* inquires as to the truth of the theory generally entertained, that, of twin sisters, one or both is barren, and mentions a case in which such sterility existed.

We can refer the writer on the other hand, to a case of twins, both of which have borne children, and these are by no means rare.

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A Wine Glass Full every Five Miles.—Mrs. Bromley in her agreeably written work, "Woman's Wanderings in the Western World," thus gives the composition of the remedy used as a preventive against fever and ague, in the West India Packet Service: "A bottle of sherry in which such a quantity of quinine has been infused, that it will demand a great deal of courage, both moral and physical, to take the prescribed quantity, which is a wine glass full every five miles."

Gutta Percha.—The discoverer of this article, the use of which is now becoming so common was the late Dr. Montgomery, of England. While travelling he observed the manifold uses to which it was applied among the Malays, and thought it might be usefully employed for splints and other surgical appliances. He collected specimens of it for the Society of Arts, for which he was awarded a gold medal.

NEWS AND MISCELLANY.

Massachusetts Medical Society.—The annual meeting of this society, for 1861, was held at Marlborough chapel, Boston, the President, Dr. John Homans, in the chair. The attendance was meagre. The papers presented were one on zymbolic diseases, by Dr. E. Cutter, of Middlesex, East District; and one on the relief of pain by subcutaneous injections, by Dr. A. Ruppaner, which was not read, the author being absent. Dr. Lincoln exhibited an enormous tumor, recently taken from the abdomen of a male patient under his care. Dr. Janes, of Dorchester, offered a series of resolutions, favoring the establishment of a Board of Health of vital statistics by the legislature of the State. The purposes of the Board are to have the general oversight of the sanitary interests of the Commonwealth; the charge of the registration law of births, marriages, and deaths, and prepare the annual report; also of the State census, and make the decennial report; also to have authority to visit all the public medical and sanitary charitable institutions in the Commonwealth and elsewhere, which receive patients for this State, and make a general annual report of their condition to the legislature. The resolutions were adopted. Dr. Henry C. Perkins, of Newburyport, delivered the annual address. The subject was the duty of the Physician and Surgeon on the day of battle or war. The officers of last year were re-elected. Dr. Henry J. Bryden was chosen anniversary chairman, and Dr. Henry I. Bowditch to deliver the next annual address.

Count Cavour.—A special correspondent of the London *Lancet* is anxious "to exonerate young Italy from the imputation of parricide" in the death of this distinguished man. Whilst admitting that "*he was bled no doubt to death,*" he says, "it is probable that in all those six or seven bleedings the whole quantity of blood lost did not amount to thirty ounces," and that an average bleeding at the hand of the "salassatore," or licensed Italian phlebotomist, is a quantity varying from three to four ounces." He mentions also that "to within a few hours of his death the Count was *his own physician,*" dictating his *own* treatment, which "the young practitioner" in attendance "blindly followed." But how do these facts "exonerate" the attending physicians? Do they not rather indicate the more certainty that the disease under which the Count labored, was one in which "bleeding" was most decidedly contra-indicated.

Surgeons Appointed.—The Governor of New Jersey has appointed Dr. Grant surgeon, and Dr. Oakley assistant-surgeon of the Second Regiment of that State; Dr. Cox, surgeon, and Dr. E. Livingston Welling, assistant surgeon of the Third Regiment. The surgeon for the First Regiment still remains an open question.

From the Army Sanitary Commission.—Rev. Dr. Bellows, President of the Commission, has recently visited the Western camps. He has seen twenty thousand troops, and inspected twenty hospitals. At Cairo he found five thousand Illinois troops, with two regiments at Bird's Point, and several companies above Cairo, on the west bank of the Ohio. The health there is good, and only two hundred and fifty men were in the hospital. The change to the Ohio water has produced diarrhœa, but the soldiers become used to it in a short time. There are several large ice-houses there, which are a source of much comfort. At Cairo a large fortress will probably be erected. The place is defended on three sides by a levee, resisting the inundations of the two rivers. The inclosed space will probably be filled up to the embankments. It is neither damp, muddy, nor unhealthy there at present. It is said that the malaria from the swamps does not produce fever and ague on those living in the immediate vicinity, but rather on persons living on high lands at some distance. The medical force at the camps was good, but there was a want of female nurses. The camp police was bad. There was carelessness in the use of sinks, and room for improvement in the culinary operations, and in establishing regular hours for meals. The men are able-bodied, well-conducted, comfortably clothed, properly equipped, and contented; have good barracks, and are the best men from all professions and trades of the West. They are all enlisted for three years.

At Alton, Dr. Bellows found the camp well situated and thoroughly drained. There are four regiments here, all enlisted for three years. The health is good. The water might be better, but is not very bad.

At Camp Pope are encamped four regiments, healthy, temperate, and well-disciplined.

In all the Western camps the men were of excellent character. The chaplains were good, earnest men. Some reforms are required and will be made. Other camps, including those in the vicinity of Washington, have been visited by the commission, and on Wednesday last they met at Washington to submit their reports to the government.

The Foot and its Covering is the title of a book recently published in London, the object of which is to exhibit the usual faults in the construction of shoes, which produce so much inconvenience and suffering, and to illustrate, on physiological grounds, the best form of foot-gear.

A Large Spot on the Sun is said to be now visible, by simply using a smoked glass, or by the unaided eye near sunset. Its location is a little to the right of the centre of the sun's disc.

A Work on Placenta Prævia, by Dr. Wm. Read, of Boston, is announced as forthcoming.

Curiosities of the English Census.—The population of England and Wales including the army, navy and merchant seamen abroad and at home has increased from 18,054,170 to 20,223,746 during the period from 1851 to 1861. Excluding the army and navy, the number of men is 9,758,852; of women 10,302.873. The *positive* increase of population has been larger than during any period of ten years during the century. The relative increase, or increase per cent. is *less* than from 1811 to 1821, when it amounted to 16 per cent. For the ten years preceding 1861 it was 12 per cent. The number of inhabited houses has increased from 1,575,-923 in 1801, to 3,745,463 in 1861. In five English and two Welsh counties the population has decreased, but the number of inhabited houses has increased. In nine English and five Welsh counties the men outnumber the women. The old central urban parishes all show a decrease. We condense the foregoing from the *Medical Times and Gazette.*

Prof. A. B. Palmer, of Michigan, says the legislature of that State *did not* pass a law requiring the establishment of a Chair of Homeopathy in the medical department of the State University.

The Hospitals for the Army in the District of Columbia have now been fully organized by the War Department. The Nursing Department is under the charge of Miss E. A. Powell, of New York.

The semi-annual meeting of the College of Physicians and Surgeons of Lower Canada was held at Montreal on the 14th of May. The question of abridging the term of medical studies from four years to three years to those students who had obtained the B. A. diploma from some University, was introduced by a deputation from McGill College, but was received with little favor.

Second Vermont Regiment.—Surgeon H. N. Ballou, Assistant-Surgeon, B. W. Carpenter. The Burlington (Vermont) *Free Press* says:—"Drs. Ballou and Carpenter are *well* fitted by character, experience, and standing as men, and in their profession, for their responsible posts, and the health of the regiment can be committed to their care with entire confidence. There will be no neglect of sick soldiers, from the boosiness of the surgeons, while they retain their posts, nor will the assistant be heard to wish that he had under his care a regiment of raw *Irishmen*, instead of "these volunteers, who thought they must be treated like gentlemen." The Vermont wing of the editorial *corps* of the REPORTER says *amen* to the above.

The annual commencement of the medical department of the University of Vermont occurred June 13th. Twenty candidates received the degree of M. D. from the President, Rev. Dr. PEASE. This school maintains its standing and reputation admirably, and has an excellent Board of Instruction.

Kentucky Registration Report, 1859.—This report, comprised in a pamphlet of 152 pages, has just come to hand. The State Registrar, Dr. S. M. Bemiss, remarks, that these returns have been rendered with ordinary fullness and accuracy." Few counties are models of careful statistical collection and preparation. From this report we gather the following statistics. The population of the State is:—Whites, 895,571, colored 226,591: Births, during 1859, white 20,806; males, 10,033, females, 9,733. Colored—5,600; males, 2,881, females, 2,619. Total, 26,406. Deaths—white, 7,521; males, 3,930, females, 3,591; Colored, 2,709—males 1,373, females, 1,336. Total, 10,230. Excess of births over deaths we find put down at 15,273, but taking the figures, as previously given, we make it 15,816. There were also 5,637 marriages in the same time. There was one birth in 42.49 of the population; one death in 109.69; and one marriage in 157.07. The natural rate of increase of population, as determined by the census of 1860, is 1.53. Of the diseases which prevailed somewhat extensively in the State, scarlatina is mentioned; of which, the proportional mortality was one in 1,293. In one county the mortality was one in 195 of the population. The deaths from consumption were 949.

Serious Charges against a Surgeon.—The Burlington (Vt.) *Free Press* publishes the affidavits of two members of the First Vermont Regiment, stating that the "treatment of members of the regiment when sick, by Surgeon Sanborn, was harsh and brutal, and that he was often so intoxicated as to unfit him for the performance of his duties." On one occasion he was "so drunk as to be entirely incapacitated to ascend a flight of stairs, where his services were required by private Underwood, of the Bradford company, and it was three hours before he was sufficiently over his drunken fit" to be able to attend to his duty.

These charges, thus distinctly made, will no doubt be investigated, and the surgeon dismissed from the service, if they are found true. Since writing the above, we learn that the statements are denied.

In the medical department of Georgetown College, the following persons received the degree of M.D.: Louis C. Hootee, Mo.; J. M. Benckley, Ohio; W. W. Hays, Ind.; A. R. Barry, Md.; Charles McCormick, D.C.; Charles Allen, Va.; W. H. Gardner, N. C.; and J. H. Porter, D. C. The honorary degree was conferred on James M. Evans, of Wales. Public ceremonies were dispensed with on the occasion.

Dr. Henry Howard has lately received the appointment of Physician to the Lunatic Asylum at St. Johns, C. E. The *British American Journal* regards it as a very unsuitable appointment, inasmuch as Dr. Howard has devoted the last fifteen years of his life to the specialties of eye and ear surgery exclusively.

MARRIED.

JACKSON—MCCARTY.—At Rockaway, N. J., on the 25th inst., by Rev. Jos. F. Tuttle, Dr. John W. Jackson and Frances McCarty.

STOKES—STOKES.—On the 20th inst., at Friends' Meeting-house, in Stroudsburg, Pa., N. Newlin Stokes, M. D., of Moorestown, N. J., and Martha E., daughter of Stogdell Stokes, of Stroudsburg.

DIED.

MONROE.—In Belfast, Me., June 21, Dr. Hollis Monroe, aged 71 years.

FOOTE.—At the city of New Haven, on the evening of the 12th inst., of Diphtheria, (the second attack within three months,) Anna Eliza, eldest child of Dr. Charles C. and Amelia L. Foote.

Answers to Correspondents.

Dr. A. M. S., Penn.—The publisher's clerk (who certainly ought to be posted in prices,) misinformed us in regard to the price of Gross' Military Surgery. We regret the error, but it was not our own. The price of the work is 50 cents.

Dr. H. E. W., Mass.—Your letter is dated North Fair. The REPORTER has been *regularly* sent to North Haven. If that is not your post-office address, please inform us We send the numbers as requested.

Dr. C. H. S., Pa.—The vaccine has been sent as requested, and circulars will be forwarded soon.

Communications Received.

Massachusetts—J. G. White; Dr. J. J. Wetherby, with encl.; Dr. J. S. Blake, with encl.; Dr. W. C. Crozier, with encl.; Dr. Charles Cullis, with encl.: Dr. Thomas J. Stephens, with encl.; Dr. A. W. R. Newton, with encl.; Dr. George S. Jones, with encl.; Dr. E. Woodbury, with encl.; Dr. J. C. Dorr; Dr. J. J. Sullivan; Dr. J. A. Burpee, with encl.; Dr. J. F. Wakefield, with encl.; Dr. G. C. Lincoln, with encl.; Dr. Charles H. Allen; Dr. E. Marston, with encl.; Dr. W. W. Wellington; Dr. J. Harlow, with encl.; Dr. John Butterworth, with encl.; Dr. J. B. Taylor, with encl.; Dr. Joseph Jackson, with encl.; Dr. S. J. Birmingham, with encl.; Dr. E. B. Moore, with encl.; Dr. Ira L. Moore, with encl.; Dr. Octavius King, with encl.; Dr. H. B. Hunton, with encl.; Dr. C. Eastman, with encl.; Dr. G. B Harriman, with encl.; Dr. C. H. Spring; Dr. T. S. Perkins, with encl.; Dr. P. R. Ridgeway, with encl.; Dr. A. G. Hall, with encl; Dr. G. Pearson, with encl.; Dr. M. Fuller, with encl.; Dr. M. Wyman; Dr. W. O. Johnson; Dr. J. F. G. Nichols, with encl.; Dr. H. J. Bigelow, with encl.; Dr H. Dupee; Dr. Wm. Osgood, with encl.; Dr. Stephen Salisbury, with encl.; Dr. E. F. Whiteman, with encl.; Dr. J. L. Simonds, with encl.; Dr. Edee. Eaton, with encl.; Dr. J. W. Burroughs, with encl.; Dr. J. T. Talbot, with encl.; Dr. George Russel, with encl.; Homœopathic Dispensary, with encl.; Dr. H. Steen; Dr. A. Hobbs, with encl.; Dr. S. K. Sheldon, with encl.; Dr. J. G. W. Pike, with encl.; Dr. H. E. Warren. *Pennsylvania*—Dr. Wm. Corson, with encl.; Dr. M. J. McKinnon; Dr. J. Breitenbach, with encl.; Dr. Wm. Voss; Dr. C. H. Smith, with encl. *Indiana*—Dr. F. T. C. Grayston, with encl. *Kentucky*—Dr. J. W. Fox; Dr. C. S. Abell. *New York*—Dr. W. B. Wood; Dr. O. O. Gibbs; Dr. R. K. Tuthill; Dr. R. R. Gregg; Dr. L. Bauer. *Rhode Island*—Dr. S. W. Francis, (2.) *Iowa*—Dr. D. Beach, with encl. *Illinois*—Dr. S. D. Fitch, with encl. *Connecticut*—Dr. Leonard Bailey.

Office Payments—Dr. S. C. McCormick, Rev. Dr. R. Hamill Nassua, Dr. John Beam, Dr. J. R. Earhart. Per Swaine: Drs. Riehl, Hatfield, Miller, McMurray, Heston, Eschleman, Howard.